ABSTRACT

Disclosed is a longitudinal magnetic field compacting method and device for manufacturing a neodymium (Nd) based rare earth magnet in the shape of a butterfly for use in VCM of HDD or DVD, a disk or coin for use in coreless motors, and a block for use in linear motors, characterized in that a longitudinal compacting process is performed under a pulse magnetic field for orientation of rare earth powders in the direction of an applied magnetic field. Further, a compacted body of the rare earth powders has the same shape as end products, thus no additional processing cost, thereby lowering manufacturing In addition, the rare earth powders can be subjected to an aligning process and a longitudinal compacting process at the same time under the high pulse magnetic field of 50-70 kOe, whereby the resulting rare earth magnet can have excellent magnetic properties of 42-50 MGOe.

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